The Massachusetts Institute of Technology (MIT) Engineering Internship Program (EIP)

Program Description

Based on the belief that real-world experience is an important aspect of a sound education, the MIT Engineering Internship Program (EIP) combines the traditional on-campus academics with off-campus work experiences at the Laboratory. By giving students an opportunity to participate in work experiences early in their careers, they can make more informed choices from among the various on-campus educational offerings, as well as obtain a better understanding of career opportunities available after graduation. Emphasis is placed on ensuring that students in the program are placed in rewarding real world work assignments that extend the learning experience into areas that are not available at MIT There is extensive faculty participation and advising in both the on- and off-campus components of the program.

This program provides the opportunity for the participating students (Table 21) to be awarded B.S./M.S. degrees simultaneous upon successful completion of all degree requirements and completion of all three work phases at the Laboratory. Program participants complete a combined B.S./M.S. thesis on a topic related to their work assignment. The thesis topic is normally determined before completion of the second work assignment, and students complete their thesis primarily during the third and final work phase of the program at the Laboratory. All thesis work is completed under the combined supervision of Laboratory staff members and an MIT faculty member.

The Laboratory benefits from the EIP in that it provides a continuum of talented, motivated students, bringing skills and insight to projects of importance to the organization. Many of these students, should they become employees, provide the Laboratory with a competitive advantage as they have already been well-integrated into the objectives, mission and culture of the organization.

Since the program's inception at the Laboratory in 1983

- 88 students have participated
- 31 students completed the program

Of the 31 that completed all phases of the program, 11 were formally offered regular UC appointments. Seven accepted the offer of employment and four rejected.

Table 21. MIT Engineering Internship Demographics

Participant Demographics			
Ethnicity	**Male**	**Female**	**Total**
Anglo	4		4
Asian/Pacific Islander	2		2
Hispanic	1		1
Total	7		7

Beginning in FY02, the program is being discontinued at MIT. Current participants will have the opportunity to complete the program, but no new students will be recruited into this specific program. Plans are in place to make other opportunities to partner with MIT and their outstanding students available at the Laboratory.

Highlights of this Year's Accomplishments

In FY 01, there were seven students who participated in the program representing five Laboratory organizations—Design Engineering (ESA-DE) (Figs. 37 and 38), Weapon Engineering (ESA-WE), Engineering Analysis (ESA-EA), Structure/Property Relations (MST-8), and Plasma Physics (P-24).

Of the seven participants, one completed the graduate work phase of the program, and one entered the graduate work phase of the program.

Figure 37. Dan Moon, ESA-WE Mechanical Engineering.

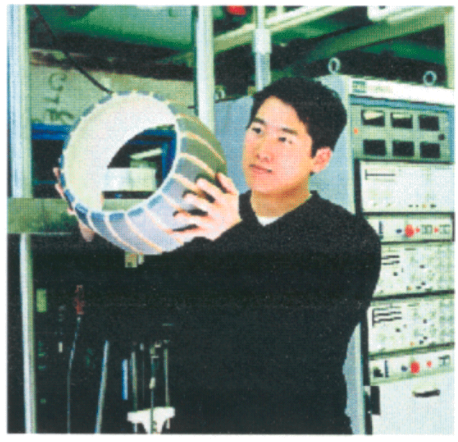

Figure 38. Warfare aft mount for the Tomahawk cruise missle.